



GENERATOR SET NEUTRAL EARTHING

GENERAL

The normal practice is to earth the neutral of the generator for the following reasons:

- To fix the voltage of the system with respect to earth to ensure that the voltage between any phase and earth does not exceed the nominal phase voltage.
- To allow earth fault protection systems to operate in the event of a phase to earth fault.
- To protect human life by decreasing the danger of electric shock.

LOW VOLTAGE GENERATORS

In low voltage systems it is normal practice to solidly earth the neutral.

HIGH VOLTAGE GENERATORS

In high voltage systems it is normal practice to earth the neutral through an earthing resistor to limit the earth fault current (usually to the full load current).

LOW VOLTAGE GENERATOR WITH STEP-UP TRANSFORMER

The step-up transformer winding configuration is normally delta on the low and star on the high voltage winding (earthed through a neutral resistor).

EARTHING (BONDING) OF CONDUCTIVE PARTS

All exposed conductive parts of the system e.g. generator frame, must be bonded to the protective earth bar.